

Objective of the Activity Done:

Introduction to power BI and data Analytics

Detailed Report:

→ The Data Analytics is the practice of the utilizing data, Statistical method and technology to extract meaningful insight and make decisions of accordingly.

→ The key Components of Data Analytics:-

The data cleaning, Data Analysis, Data Visualization and Interpretation.

→ DA Tools are Software Programs, applications and other that help Professionals analyze data sets to provide insight, predictions and decision of making information.

→ The Power BI visualizes the graph dashboards, and pie charts. It facilitates reports etc.

Explained about features of power BI.

→ Power BI Components like Data View, Power views, Power queries, desktop, and power BI Service etc.

Objective of the Activity Done:

To Data Importing and Modeling

Detailed Report:

- The Data modelling is the creating relationship between table by using the Primary key.
- Data insights flow in Power BI: Data source, data view and model view for data modelling.
- To explored different data connectors available in Power BI, such as Excel, SQL databases and online services.
- Learned about ETL (Extract, Transform, Load) process within Power BI.
- We learned how to clean, reshape and prepare data using Power Query's editor of Excel.
- The training of covered essential functions like filtering, merging and appending data sets. Additionally we were introduced to data modelling concepts such as relationships, Cardinality and data hierarchies.
- To practical data modeling techniques, including creating two relationships between table using a DAX (Data Analysis expressions) and the functions, and designing calculated columns.

Objective of the Activity Done: Data Visualization using Power BI.

Detailed Report:

- The learned about various of visualization options available in Power BI, including the Power charts, advanced charts, maps and custom visuals.
- Studied choosing appropriate visualization for a different data types and insights of power BI.
- To tools of present in power BI desktop are the Remove columns, Reduce rows, Sorting, Split and Column, group by replace values, transpose, above rows rows, Count rows, Rename, etc.
- There are two way for analyzing the data of they are visualization and Statistical.
- In the Third week, the emphasis was on data of visualization techniques using power BI.
- we explored various types of charts, graphs and maps that can be created in power BI to visualize data of insights. we also learned about customizing visual elements. The sessions included lot practices for selecting the value of right visualization above based on the types of data.

Objective of the Activity Done:

Advanced Data Analysis with 'DAX'

Detailed Report:

- This week was dedicated to the deepening on our understanding of 'DAX' for advanced data analysis.
- The DAX's ability to handle and complex of expressions and provided advanced of calculation directly within Power BI.
 - DAX in environment empowers user to use their data in transformative ways.
 - The Strategic planning to Predicting future trends and improving Customer 'DAX' of satisfaction.
 - Data Analysis expressions DAX is a library of functions and operators that can be combined to build formulas and expression in Power BI.
 - Analysis Services, and Power Pivot is a excel data models.
 - Applied time intelligence functions to analyze trends over time.
 - To improve that the accuracy and efficiency of data model using a Advanced of 'DAX'.

Objective of the Activity Done:

Functions and Power BI Service

Detailed Report:

The Functions of Power BI is a Collection of Software Services apps and connectors that works together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights - table.

- Power BI data might be an excel spreadsheet or a Collection of cloud-based and on-premises to a data base.
- The Power BI lets you easily connect to your data sources, visualize and discover.
- A windows of desktop application called a Power BI Desktop.
- Power BI Desktop, the source and the designed to let a create, share and consume business and role more effectively.
- To create a Power BI Report Build for creating paginated to share in the Power BI Service.
- To finally to a focus of this week was on applying of Power BI skills.

Objective of the Activity Done:

Report Optimization and performance ^{Tuning}

Detailed Report:

This week focused on performance for existing reports by Optimizing the process of the Power BI.

→ Learned about Power BI Optimization of report can tell you the including data reduction, efficient use the DAX of every Optimizing of Optimization.

→ To Implemented incremental data refresh to improve the report load times.

→ The invaluable tool for Performance of tuning is the report of optimization report from the memory usage.

→ This Session also included Case Studies show caring how to companies use the Power BI for using Business Intelligence, and sales of analysis, reporting and operational effectively.

→ Optimized of existing reports to load the data faster and handle larger data sets.

→ To the overall of performance and user to experience of Power BI reports.

Objective of the Activity Done:

→ Assignment of Project Work

Detailed Report:

The Data Analysis and Visualization.

This week was dedicated to learning to publish and share power BI reports with Stakeholders.

→ The Power BI Product team will guide you through the Power BI end-to-end.

Starting from how to connect to and import your data.

→ The project involved analyzing a dataset of provided by a Smart Pntuz, cleaning and transforming the data, building data model.

→ Power BI Desktop, publish those reports to the Power BI Service Create a dashboard and share to business users.

→ Successfully published report to the Power BI service and shared them with the internship team.

→ To connecting, importing, shaping and transforming data for business intelligence.

→ Received feedback on the accessibility and usability of the published reports.

Objective of the Activity Done:

Finalization of Project work.

Detailed Report:

Finalization and presentation.

The final week was focused on completing a capstone project and presenting to the internship project of Power BI Supervisor.

- The worked on a final project that involved to analyzing a complex data set and presenting of actionable to a mock client.
- Presented the final report to all the internship Supervisors, showcasing the like a skills and knowledge gained throughout the internship.
- Developed a comprehensive power BI report that included data exploration, advanced visualizations, and key recommendations.
- Successfully completed the Capstone Project demonstrating a strong understanding of data analytics using power BI.
- Concluded the internship with a deeper appreciation for data analytics and Power BI as a business intelligence tool.